MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER POLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 65102

FORM UIC – APPLICATION FOR CLASS V PERMIT

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

PART A - DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS.

1.00 ACTION REQUESTED

☐ Construction Permit Application ☐ Operating Permit Application

2.00 FACILITY INFORMATION

FACILITY NAME	TELEPHONE NUMBER
ADDRESS	FAX NUMBER

2.1 CONSTRUCTION PERMIT NUMBER, IF APPLICABLE

2.2 OPERATING PERMIT NUMBER, IF APPLICABLE

2.3 FACILITY LOCATION (ATTACH A 1" = 2000' SCALE USGS TOPOGRAPHIC MAP SHOWING LOCATION)

_____ 1/4, _____ 1/4, SEC. _____ TOWNSHIP _____ RANGE _____, _____ COUNTY

3.00 OWNER INFORMATION

OWNER NAME	TELEPHONE NUMBER
ADDRESS	FAX NUMBER

4.00 CONTINUING AUTHORITY INFORMATION

NAME	TELEPHONE NUMBER
ADDRESS	FAX NUMBER

5.00 FACILITY CONTACT INFORMATION

NAME	TITLE	TELEPHONE NUMBER

6.00 GENERAL INFORMATION

6.1 BRIEF DESCRIPTION OF PURPOSE OF INJECTION. INCLUDE ANALYSES AND CONCENTRATIONS OF ANY POLLUTANTS TO BE REMEDIATED. (ATTACH A SEPARATE SHEET IF NECESSARY)

6.2 BRIEF DESCRIPTION OF FACILITIES TO ACCOMPLISH INJECTION. ATTACH A SIMPLIFIED GEOLOGIC CROSS SECTION SHOWING DEPTH TO BEDROCK, DEPTH TO AQUIFERS, AND DEPTH OF INJECTION. ALSO ATTACH MATERIAL SAFETY DATA SHEETS FOR EACH OF THE INJECTED MATERIALS. IF INJECTION WELL IS TO BE CASED, PROVIDE SCHEMATIC.

6.3 IF BIOLOGICAL AGENTS ARE TO BE INTRODUCED IN THIS PROCESS, A BIOLOGICAL PROFILE AND LITERATURE RESEARCH MUST BE SUBMITTED WITH THIS APPLICATION.

6.4 WILL THIS PROCESS INVOLVE A HAZARDOUS WASTE AS DEFINED IN 10 CSR 25-4.010?	6.5 WILL THIS PROCESS RESULT IN DISCHARGE TO SURFACE WATER?
☐ YES ☐ NO	☐ YES ☐ NO If yes, an NPDES permit must be obtained.

6.00 GENERAL INFORMATION (CONTINUED)

6.6 HOW MANY TOTAL POUNDS OF CHEMICALS OR BIOLOGIC MATERIALS WILL BE INJECTED?

6.7 IF THIS INJECTION IS INTO AN AQUIFER, HOW WILL THE INJECTED CHEMICALS BE WITHDRAWN OR REDUCED TO INJECTION LEVELS?

6.8 IF THE CHEMICALS OR BIOLOGIC AGENTS TO BE INJECTED ARE ALREADY PRESENT IN THE GROUNDWATER, GIVE CONCENTRATIONS:

CHEMICAL/BIOLOGIC AGENT	PRE-INJECTION CONCENTRATION (mg/L)
1.	1.
2.	2.
3.	3.

7.00 OTHER WELL TYPES ON SITE

YES	NO	TYPE	# AT LOCATION	WELL STATUS		
				ACTIVE	INACTIVE PLUGGED	INACTIVE NOT PLUGGED
☐	☐	ABANDONED WATER WELL		☐	☐	☐
☐	☐	AQUIFER RECHARGE WELL		☐	☐	☐
☐	☐	AQUIFER REMEDIATION WELL		☐	☐	☐
☐	☐	AUTOMOBILE SERVICE STATION DISPOSAL WELL		☐	☐	☐
☐	☐	GROUND SOURCE HEAT PUMP (OPEN LOOP)		☐	☐	☐
☐	☐	IMPROVED SINKHOLE		☐	☐	☐
☐	☐	INDUSTRIAL DRAINAGE WELL		☐	☐	☐
☐	☐	MINE BACKFILL WELL		☐	☐	☐
☐	☐	SEPTIC TANK WITH LATERAL FIELD THAT HAS THE POTENTIAL TO BE USED BY MORE THAN 20 PEOPLE PER DAY		☐	☐	☐
☐	☐	OTHER _____		☐	☐	☐

7.1 WILL INJECTION WELLS BE CASED?

☐ YES ☐ NO

IF YES, A PERMIT MAY BE REQUIRED FROM THE GEOLOGIC SURVEY AND RESOURCE ASSESSMENT DIVISION, P.O. BOX 250, ROLLA, MO, 65402-0250 OR CALL (573) 368-2101.

8.00 SIGNATURE INFORMATION

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER
SIGNATURE	DATE SIGNED

9.00 DATA

9.1 THIS SECTION MUST BE COMPLETED IF INJECTION IS INTO AN AQUIFER. IT MUST BE COMPLETED PRIOR TO INJECTION. AT LEAST ONE ANALYSIS MUST BE PERFORMED FOR EACH POLLUTANT LISTED. IF INJECTION IS NOT TO AN AQUIFER, SKIP AND GO TO PART 9.2.

POLLUTANT	MAXIMUM DAILY VALUE	
	CONCENTRATION	MASS
Biochemical Oxygen Demand (BOD)		
Chemical Oxygen Demand (COD)		
Total Organic Carbon (TOC)		
Ammonia as N		
Flow	VALUE	
Temperature (winter)	VALUE	
Temperature (summer)	VALUE	
pH	MINIMUM	MAXIMUM

9.2 MARK "X" IN COLUMN (a) FOR EACH POLLUTANT YOU KNOW OR HAVE REASON TO BELIEVE IS PRESENT. MARK "X" IN COLUMN (b) FOR EACH POLLUTANT YOU BELIEVE TO BE ABSENT. IF YOU MARK COLUMN (a) FOR ANY POLLUTANT, YOU MUST PROVIDE THE RESULTS OF AT LEAST ONE ANALYSIS FOR THAT POLLUTANT. COMPLETE ONE TABLE FOR EACH WELL. SEE THE INSTRUCTIONS FOR ADDITIONAL DETAILS AND REQUIREMENTS.

POLLUTANT AND CAS. NO. (IF AVAILABLE)	MARK "X"		MAXIMUM DAILY VALUE	
	(a) PRESENT	(b) ABSENT	CONCENTRATION	MASS
Bromide (24959-67-9)				
Total Residual Chlorine				
Color				
Fecal Coliform				
Fluoride (16984-48-8)				
Nitrate/Nitrite (as N)				
Nitrogen, Total Organic (as N)				
Oil and Grease				
Total Phosphorus (as P) (7723-14-0)				
Radioactivity				
Alpha, Total				
Beta, Total				
Radium, Total				

9.00 DATA (CONTINUED)

POLLUTANT AND CAS. NO. (IF AVAILABLE)	MARK "X"		MAXIMUM DAILY VALUE	
	(a) PRESENT	(b) ABSENT	CONCENTRATION	MASS
Sulfate (as SO^4) (14808-79-8)				
Sulfide (as S)				
Sulfite (as SO^3)				
Surfactants				
Aluminum, Total (7429-90-5)				
Barium, Total (7440-39-3)				
Boron, Total (740-42-8)				
Cobalt, Total (7440-48-4)				
Iron, Total (7439-89-6)				
Magnesium, Total (7439-95-4)				
Molybdenum, Total (7439-98-7)				
Manganese, Total (7439-96-5)				
Tin, Total (7440-31-5)				
Titanium, Total (7440-32-6)				
METALS, CYANIDE, AND TOTAL PHENOLS				
1M. Antimony, Total (7440-36-0)				
2M. Arsenic, Total (7440-38-2)				
3M. Beryllium, Total (7440-41-7)				
4M. Cadmium, Total (7440-43-9)				
5M. Chromium, Total (7440-47-3)				
6M. Copper, Total (7550-50-8)				
7M. Lead, Total (7439-97-6)				
8M. Mercury, Total (7439-97-6)				
9M. Nickel, Total (7440-02-0)				
10M. Selenium, Total (7782-49-2)				
11M. Silver, Total (7440-22-4)				
12M. Thallium, Total (7440-28-0)				
13M. Zinc, Total (7440-66-6)				
14M. Cyanide, Total (57-12-5)				
15M. Phenols, Total				
GC/MS FRACTION – VOLATILE COMPOUNDS				
1V. Acrolein (107-02-8)				
2V. Acrylonitrite (107-13-1)				
3V. Benzene (71-43-2)				
4V. Bis (Chloromethyl) Ether (542-88-1)				
5V. Bromoform (75-25-2)				
6V. Carbon Tetracholoride (56-23-5)				
7V. Cholorenzene (108-90-7)				

9.00 DATA (CONTINUED)

POLLUTANT AND CAS. NO. (IF AVAILABLE)	MARK "X"		MAXIMUM DAILY VALUE	
	(a) PRESENT	(b) ABSENT	CONCENTRATION	MASS
GC/MS FRACTION – VOLATILE COMPOUNDS				
8V. Cholodibromomethane (124-48-1)				
9V. Chloroethane (75-00-3)				
10V. 2-Chloroethylvinyl Ether (110-75-8)				
11V. Chloroform (67-66-3)				
12V. Dichlorobromomethane (75-27-4)				
13V. Dichlorodifluoromethane (75-71-8)				
14V. 1,1-Dichloroethane (75-34-3)				
15V. 1,2-Dichloroethane (107-06-2)				
16V. 1,1-Dichloroethylene (75-35-4)				
17V. 1,2-Dichloropropane (78-87-5)				
18V. 1,2-Dichloropropylene (542-75-6)				
19V. Ethylbenzene (100-41-4)				
20V. Methyl Bromide (74-83-9)				
21V. Methyl Chloride (74-87-3)				
22V. Methylene Chloride (75-09-2)				
23V. 1,1,2,2-Tetrachlorothane (79-35-4)				
24V. Tetrachloroethylene (127-18-4)				
25V. Toluene (106-88-3)				
26V. 1,2-Trans Dichloroethylene (156-60-5)				
27V. 1,1,1-Trichloroethane (71-55-6)				
28V. 1,1,2-Trichloroethane (79-00-5)				
29V. Trichloroethylene (79-01-6)				
30V. Tricholorluoromethane (75-89-4)				
31V. Vinyl Chloride (75-01-4)				
GS/MS FRACTION – ACID COMPOUNDS				
1A. 2-Chloropheno (95-57-8)				
2A. 2,4-Dichlorophenol (120-83-2)				
3A. 2,4-Dimethylphenol (105-67-9)				
4A. 4,6-Dinitro-O-Cresol (534-52-1)				
5A. 2,4-Dinitrophenol (51-28-5)				
6A. 2-Nitrophenol (88-75-5)				
7A. 4-Nitrophenol (100-82-7)				
8A. P-Chloro-M-Cresol (59-50-7)				
9A. Pentachlorophenol (87-86-5)				
10A. Phenol (106-95-2)				
11A. 2,4,6-Trichlorophenol (88-06-2)				

9.00 DATA (CONTINUED)

POLLUTANT AND CAS. NO. (IF AVAILABLE)	MARK "X"		MAXIMUM DAILY VALUE	
	(a) PRESENT	(b) ABSENT	CONCENTRATION	MASS
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS				
1B. Acenaphthene (83-32-9)				
2B. Acenaphtylene (208-96-8)				
3B. Anthracene (120-12-7)				
4B. Benzidine (92-87-5)				
5B. Benzo (a) Anthracene (56-55-3)				
6B. Benzo (a) Pyrene (50-32-8)				
7B. 3,4-Benzofluoranthene (205-99-2)				
8B. Benzo (ghi) Perylene (191-24-2)				
9B. Benzo (k) Fluoranthene (207-08-9)				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)				
11B. Bis (2-Chloroethyl) Ether (111-44-4)				
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				
15B. Butyl Benzyl Phthalate (85-68-7)				
16B. 2-Chloronaphthalene (91-58-7)				
17B. 4-Chloronaphenyl (7005-72-3)				
18B. Chrysene (218-01-9)				
19B. Dibenzo (a,h) Anthracene (53-70-3)				
20B. 1,2-Dichlorobenzene (95-50-1)				
21B. 1,3-Dichlorobenzene (541-73-1)				
22B. 1,4-Dichlorobenzene (106-46-7)				
23B. 3,3-Dichlorobenzidine (91-94-1)				
24B. Diethyl Phthalate (84-66-2)				
25B. Dimethyl Phthalate (113-11-3)				
26B. Di-N-Butyl Phthalate (84-74-2)				
27B. 2,4-Dinitrotoluene (121-14-2)				
28B. 2,6-Dinitrotoluene (606-20-2)				
29B. Di-N-Octyl Phthalate (117-84-0)				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)				
31B. Fluoranthene (206-44-0)				
32B. Fluorene (86-73-7)				
33B. Hexachlorobenzene (118-71-1)				
34B. Hexachlorobutadiene (87-68-3)				
35B. Hexachlorocyclopentadiene (77-47-4)				
36B. Hexachloroethane (67-72-1)				
37B. Indeno (1,2,3-c,d) Pyrene (193-39-5)				

9.00 DATA (CONTINUED)

POLLUTANT AND CAS. NO. (IF AVAILABLE)	MARK "X"		MAXIMUM DAILY VALUE	
	(a) PRESENT	(b) ABSENT	CONCENTRATION	MASS
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (CONTINUED)				
38B. Isophorone (78-59-1)				
39B. Naphthalene (91-20-3)				
40B. Nitrobenzene (98-95-3)				
41B. N-Nitrosodimethylamine (62-75-9)				
42B. N-Nitrosodi-N-Propylamine (621-64-7)				
43B. N-Nitrosodiphenylamine (83-30-6)				
44B. Phenanthrene (85-01-8)				
45B. Pyrene (129-00-0)				
46B. 1,2,4-Trichlorobenzene (120-82-1)				
GC/MS FRACTION – PESTICIDES				
1P. Aldrin (309-00-2)				
2P. α-BHC (319-84-6)				
3P. β-BHC (319-85-7)				
4P. χ-BHC (58-89-9)				
5P. δ-BHC (319-86-8)				
6P. Chlordane (57-74-9)				
7P. 4,4-DDT (50-29-3)				
8P. 4,4-DDE (72-55-9)				
9P. 4,4-DDD (72-54-8)				
10P. Dieldrin (60-57-1)				
11P. α-Endosulfan (115-29-7)				
12P. β-Endosulfan (115-29-7)				
13P. Endosulfan (1031-07-8)				
14P. Endrin (72-20-8)				
15P. Endrin (7421-93-4)				
16P. Heptachlor (76-44-8)				
17P. Heptachlor Epoxide (1024-57-3)				
18P. PCB-1242 (53469-21-9)				
19P. PCB-1254 (11097-69-1)				
20P. PCB-1221 (11104-28-2)				
21P. PCB-1232 (11141-16-5)				
22P. PCB-1248 (12672-29-6)				
23P. PCB-1260 (11096-82-5)				
24P. PCB-1016 (12674-29-6)				
25P. Toxaphene (8001-35-2)				
DIOXIN				
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			DESCRIBE RESULTS	

INSTRUCTIONS FOR FORM UIC – APPLICATION FOR CLASS V PERMIT

Please read these instructions carefully before completing the application. Send a signed application along with appropriate permit fee to the Water Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Please make your check payable to State of Missouri.

1.0 ACTION REQUESTED

Construction Permit Application - Check only if the application is for a permit to construct an injection/recovery well system.
Operating Permit Application - Check only if the application is for a permit to operate an injection/recovery well system.
Operating Permit Renewal Application - Check only if the application is for a renewal of an existing permit.

2.0 FACILITY INFORMATION

Name - The site-specific name of the facility where the injection/recovery operation is to be conducted.
Address - Physical address of the site-specific facility.

2.1 Construction Permit Number - provide the UIC construction permit number that the injection/recovery system was constructed under, if this application is for an operating permit for the same facility.

2.2 Operating Permit Number - include only the facility's NPDES or UIC permit number(s) if one or more are in effect. If multiple Class V permits are presently in effect, attach a separate list.

2.3 Facility Location - provide location data.

3.0 OWNER INFORMATION

Name the individual, institution, agency or corporation that owns the facility.

4.0 CONTINUING AUTHORITY INFORMATION

Name the permanent organization that will serve as the continuing authority for the operation, maintenance, and modernization of the facility.

5.0 FACILITY CONTACT

Name the individual within the facility, or operator, most able to supply information about the direct operation of the injection/recovery operation.

6.0 GENERAL INFORMATION

6.1 Purpose of injection/recovery - attach separate pages if needed. Include all or portions of an engineering report containing information needed by the owner, continuing authority, and the Department of Natural Resources to fully describe the purpose of the injection/recovery system.

6.2 Description of the injection/recovery process - attach separate pages if needed. Include all or portions of the engineering report required by #2 above, or submit a separate detailed description of all elements or the product, treatment and injection system required to allow the owner, continuing authority or the Department of Natural Resources to adequately review the system.

The geologic report should contain, at a minimum: a description of the injection/recovery well pattern; a description of the injection zone including details of lithology, hydrology, and unique features of the injection zone and relevant formation; injection and recovery timeframes; systems for transporting, storing, mixing, metering, and introducing injection materials; recovery fluid gathering systems, treatment or recycling, and disposal systems.

6.3 Biological Agents - list and describe all biological agents to be injected, including: scientific names; whether or not the agents are native to the formations involved; list of available literature relevant to the use of the agents for the injection operation; their population and nutrient dynamics under proposed operating conditions; discussion and supporting literature regarding potential health and/or environmental impacts of the agents and their metabolites in and downgradient of the injection zone; and after completion of the operation; results of laboratory tests conducted by or for the facility relevant to the injection/recovery operation.

6.4 Hazardous Waste - will the process involve hazardous wastes as defined by federal and state hazardous waste laws?

6.5 Surface Discharge - if needed, contact the Water Pollution Control Program for a State Operating Permit application at least 180 days prior to any planned discharge.

6.6 Give total estimated amounts of materials to be injected.

6.7 Describe how injected chemicals will be withdrawn to pre-injection levels.

6.8 Provide analytical data on the pre-injection concentrations of substances to be injected, if these substances are already present in the groundwater. Examples: manganese, if potassium permanganate is injected; or BOD, if a biological agent is to be injected.

INSTRUCTIONS FOR FORM UIC – APPLICATION FOR CLASS V PERMIT (CONTINUED)

7.0 OTHER WELL TYPES ON SITE

If there are existing wells already on site, give the type, number at location and status.

8.0 SIGNATURE

The application **must** be signed by a geologist registered in the State of Missouri or other groundwater professional registered in the State of Missouri.

9.0 DATA

9.1 This section must be completed if injection is into an aquifer. It must be completed prior to injection. At least one (1) analysis must be completed for each pollutant listed.

9.2 Mark an "X" for each pollutant believed to be present or absent in the groundwater. If present, at least one (1) analysis must be completed for that pollutant.

ADDITIONAL FORMS

To apply for termination of this permit, you must submit a completed Form J. Also attach analyses from samples taken after project completion. These analyses must indicate that concentrations of remediated pollutants have not increased from pre-project concentrations.